DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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RAYNOLDS & NOURSE, *Proprietors.* OFFICE, QUINCY HALL, BOSTON. S. W. COLE, *Editor.*

NEW YEAR.

A happy New Year to all our readers. This is our ardent wish; and should we be blessed with life and health, we shall labor diligently and zealously to accomplish our purpose, and not deal in mere words, as custom and fashion may dictate. Among the great means of happiness are intelligence and benevolence. We should labor for our own advancement in useful knowledge, and at the same time endeavor to elevate also all others within the circle of our influence.

A good fund of knowledge on the practical purposes of life affords advantages in every branch of business, and it is a never-failing source of enjoyment at our leisure, and in the social circle. But to have the true enjoyment from a fund of useful knowledge, the fountain should overflow, and the possessor feel his expanding soul warmed up with the genial glow of benevolence. The man of intelligence, as he disseminates information to benefit his brother man, finds that his own stock is increasing by the operation. His mind becomes enlarged and capable of receiving and enjoying wisdom in proportion to his liberality in dispensing it. Those who put their light under a bushel, or hide their talent in the earth, act upon a narrow principle of misguided selfishness.

Of all classes, the cultivators of the soil are the most benevolent, in regard to valuable information which they gain by experience and observation. Instead of taking out a patent for it, in order to secure to themselves the sole advantage of their discovery, they most cheerfully disseminate it over the land, that others may also reap a profit from their improvement. This distinguishing characteristic of the farmer and gardener is what gives interest and value to agricultural journals.

For more than fifteen years we have conducted agricultural papers, and we have not yet seen a cultivator of the earth, who would not most cheerfully communicate his best modes of management, and allow them to be disseminated for the benefit of others. We never have seen at the most productive and beautiful fields, the repugnant words, "No Admittance!" On the contrary we have received a cheerful welcome, and every thing appertaining to superior practice has been at our disposal.

Yet we would say that too often we find farmers reluctant in reporting their doings from a diffidence in appearing before the public, and apparently dictating or suggesting to others what they should do. This responsibility they often evade, when with less modesty they might be more useful.

As we shall labor to make this a happy New Year to our patrons, we hope that they will make a cordial return, cheerfully aid us, and in mutual instruction, benefit themselves and others together. There are many of our best farmers who are sufficiently benevolent to freely communicate valuable information, but their large share of diffidence holds them back. This shows that one may have too much of one virtue to allow others full play. Let every one who can, freely furnish useful matter for the common good.

WOODLAND.

Wood, both for fuel and timber, is becoming an important subject throughout all parts of the country that have been long settled. Railroads have become common in many sections, and the shrill whistle of the steam engine reminds us of the vast amount of fuel, consumed by these voracious fiery steeds.

In many places, in farming regions, all the fuel as well as timber is brought from distant places, and at great expense. At the same time, in such places, there are waste lands sufficient to produce all the wood that is needed. A part of these lands would produce a good crop of wood before the other lands will be all improved, so that for the use of lands, in such way, there would be no outlay, but on the contrary, they would be greatly improved by raising a crop of trees on them.

This, at first view, may appear strange. That a piece of poor land should produce thirty cords of wood in twenty years, and the land become en-

riched meanwhile, is a fact not only well known, but it is easily accounted for. Take a large tree, root, trunk, branches, leaves and all, and consume it in a fire, and all that remains of it is a small quantity of ashes. All the rest has been scattered to the winds, and these elements that have been dissipated in the air, all came from the atmosphere. All that came from the earth is the small quantity of ashes that remains.

Now as a large crop of leaves are produced annually, which fall to the ground and enrich it, this constant addition of fertilizing matter renders the land very productive, in the course of fifteen or twenty years, while a good crop of wood is growing. Lands thus renovated, are better than old lands for almost every crop, particularly for fruit.

The subject of raising wood is one of great importance in most parts of the country, and owing to the value of land in regions where this would be a profitable business, every one who goes into it should examine the subject well, and determine on the best kind of trees adapted to his soil, and the best mode of propagation and management.

In regard to cutting trees on woodlands there is frequently a very injudicious course pursued. Many years ago, it was a common practice both in Europe and in this country, to cut out the decaying, and the largest trees, leaving the more vigorous and younger trees to grow from the more room that was allowed for their expansion. This plan seemed very plausible. But experience showed that the smaller trees grew but slowly, and that they shaded too much for new trees to start from the ground; so that after many years the old growth was cut away, and there was no new growth to take its place.

For sometime past a new course has generally obtained in Europe, and the same plan has been pursued by the most judicious managers in this country. This mode is to cut off all the trees, perfectly clean, as far as necessary for use, or for sale, where there is a good crop, and a good market. The consequence is that a new growth starts up suddenly, and all the trees have an equal chance, and a new and large growth, is produced in a short period.

The growth of wood, under this plan, is four times as great as it is under the old system. We now have in our view, a fine wood lot, where the large and decaying trees were cut away, and after this course had been pursued for twenty or twenty-five years, there was no growth left excepting a few scattering trees; but near by, where the old growth was all cut off at once, in the course of the time here named, a new, handsome, and heavy growth was produced.

The results of different modes of management have a great effect, even where statements as to the mode we have recommended, and reason therefor, may fail to have an influence. Some practices that have been long pursued, and that appear very reasonable, cannot be done away at once by statements, and a new course of reasoning, or by facts. Yet, examples would afford convincing proof. Arboriculture will become a great branch with the farming community.

OBITUARY.

Hon. Asa T. Newhall, of Lynnfield, has recently "gone the way of all the earth." As a farmer he was distinguished for his intelligence and correct practice. He was equally well known for his zeal in promoting agricultural improvement, and for many years was an active member, and frequently an efficient officer, of the Essex agricultural society. A few years since we had the pleasure of listening to an excellent address by him before that association. To a strong corps of such men, that society owes its great success and its powerful influence, not only in that county, but throughout the country, by its Transactions.

AGRICULTURAL MEETINGS.—Agreeable to adjournment, the first meeting at the State House will be held on the second Tuesday after the meeting of the Legislature, (Jan. 15th,) at seven o'clock in the evening. It is desirable that all the friends of agriculture, who can, should attend these meetings, and aid in making them interesting and instructive.

THAWING FROZEN VEGETABLES.

Frozen vegetables, fruits, &c., may be thawed in such a manner that they will receive but very little injury from freezing and thawing. If the frozen substance be immersed in cold water, whose temperature is but little above that of freezing, the frost will soon be extracted without injury.

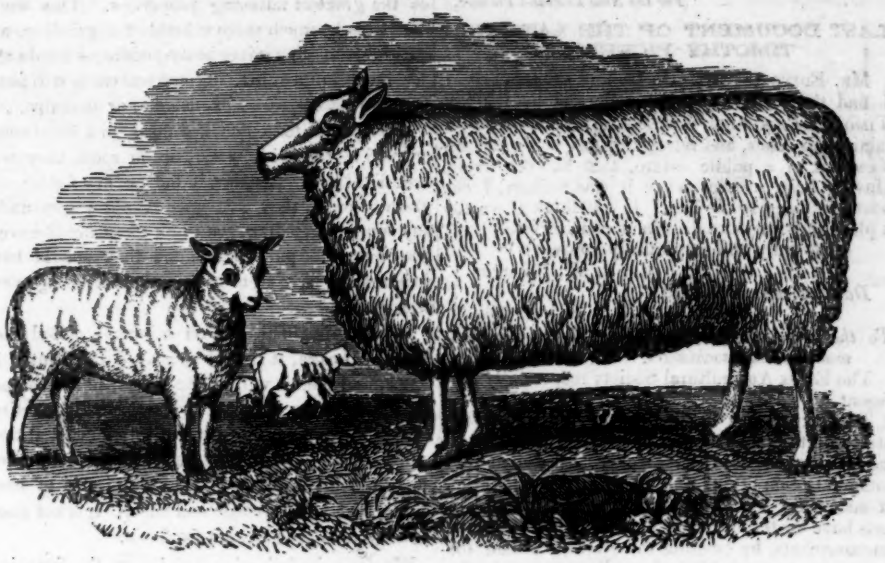
If frozen vegetables be covered up in the ground, or closely covered with moss, cloths, mats, &c., and laid in a dark cellar, the frost will be gradually extracted without material injury to the article.

By these modes of thawing, the change is gradual, hence it has but little effect. But if a frozen vegetable or fruit be put into warm or hot water, or carried into a warm room, or placed by a fire, the sudden change from a frozen to a thawed state, will destroy it as completely as though it had been baked or boiled. Thus it appears that the thawing, rather than the freezing, destroys the vegetable.

☞ It is said that Capt. Ericson is engaged in producing a steam carriage for use upon plank roads, by which immense loads may be transported at a good speed, with small cost.

☞ A farmer in Wilton, Me., has lately sent 40 barrels of Beachnuts to the Boston market.

☞ One of the sublimest things in the world is plain truth.—*Bulwer.*



NEW LEICESTER SHEEP.

This valuable breed, in its improved condition, has been produced by the skill and perseverance of Robert Bakewell, Esquire, who ranks among the most distinguished of English breeders. He commenced his career as a breeder, about 100 years ago, and for a long course of years he pursued his design with that zeal and intelligence which is sure to lead to success.

Previous to his time this species of animals had been bred with a view to great size and large fleeces, without regard to symmetry, or the quality of fleece or flesh. Aptitude to fatten and early maturity were also minor considerations.

As Mr. Bakewell considered the carcass the most valuable part of the sheep, this was made a leading object with him. Yet as this breed yields a large fleece, of tolerable fineness and of strong fibre, it is of considerable value; and we should recommend this breed where the fleece is a leading consideration. It is distinguished for compactness and symmetry of form; for early maturity; for its fattening propensities; and for the mixture of fat with the lean, having but little loose fat on the inside.

The following description of the new Leicester breed is from that excellent work by Morrell, the "American Shepherd."

The head should be hornless, long, small, tapering towards the muzzle, and projecting horizontally forwards. The eyes prominent, but with a quiet expression. The ears thin, rather long, and directed backwards. The neck full and broad at its base where it proceeds from the chest, but gradually tapering towards the head, and being particularly fine at the junction of the head and neck; the neck seeming to project straight from the chest, so that there is, with the slightest possible deviation, one continued horizontal line from the rump to the poll. The breast broad and full; the shoulders also broad and round, and no uneven or angular formation where the shoulders join either the neck or the back, particularly no rising of the withers, or hollow behind the situation of these bones. The arm fleshly through its whole extent, and even down to the knee. The bones of the leg small, standing wide apart, no looseness of skin about them, and comparatively bare of wool. The chest and barrel at once deep and round; the ribs forming a considerable arch from the spine, so, as in some cases, and especially when the animal is in good condition, to make the apparent width of the chest even greater than the depth. The barrel ribbed well home, no irregularity of line on the back or the belly, but, on the sides, the carcass very gradually diminishing in width towards the rump. The quarters long and full, and, as with the fore legs, the muscles extending down to the hock; the thighs also wide and full. The legs of moderate length, the pelt also moderately full, but soft and elastic, and covered with a good quantity of white wool, not so long as in some breeds, but considerably finer.

This valuable breed of sheep has been scattered over Great Britain, and they are found in various sections of the United States, and in the British provinces. They are adapted to lands tolerably fertile, though they do not require the luxuriant herbage of the Cotswold, and other larger breeds. And hilly lands with short pasturage, are better adapted to the South Down, Cheviot, and other smaller breeds, than to this race; for they are large and should not be compelled to travel far to gather their food.

In many sections of our country, the raising of new Leicester sheep for the market would be profitable, if particular attention should be paid to obtaining a good sized carcass and fat mutton, as such command high prices.

For the New England Farmer.

LAST DOCUMENT OF THE LATE HON. TIMOTHY PICKERING.

Mr. Editor:—Sir,—On looking over *old papers*, I find the following petition drafted by the late Timothy Pickering;—which is valuable, as containing *his views*, and interesting, as being the *last document* of a public nature, that he ever wrote. Having been present when it was written, I can bear testimony to the fact. If you think it worthy a place in your journal, it is at your service.

Very truly and respectfully yours,
J. W. Proctor.

Danvers, Dec. 20, 1850.

To the Honorable the Legislature of the Commonwealth of Massachusetts.

The Essex Agricultural Society respectfully represent,

That experience having convinced them of the utility of this, and similar institutions, in promoting improvements in husbandry, by the mutual communication of information, and the exhibition of successful results in practice;—and that premiums have materially contributed to produce those improvements, by exciting the desire to obtain the honors due to every kind of excellence;—while the pecuniary value of the premiums compensate, in some degree, the expense of time and money, in executing promising experiments;—and the pecuniary aid derived from the public treasury being a most important addition to their own funds;—the said society believing the public interest involved in the measure, have thought it to be their duty, to pray the legislature to renew, for such term as to its wisdom shall appear proper, the provisions heretofore made for this object; to encourage further improvements, in the most important of all arts, that on which human life, as well as human comfort, essentially depend.

Timothy Pickering, Benjamin Pickman, John W. Proctor, } *Committee of the Trustees.*

Salem, January 13, 1829.*

* Col. Pickering died at Salem, on the 29th of the same month of January, aged 83 years, 6 months, 12 days, having been sick about a fortnight, and this his first sickness; and the only occasion for using medicine for more than fifty years.

For the New England Farmer.

FATTENING SHEEP.

Mr. Editor:—Will you please to inform me from some practical feeder, the best mode of fattening sheep. Having on hand one hundred wethers of a superior quality, and never having fed any, I would respectfully inquire of you what kind of grain is best for them, what quantity to give them, and whether it is best to mix different kinds of grain or to keep them separate. Please inform me also whether water is important in feeding grain and hay. I make these requests in order to turn my feed to the best account. If you will insert in your next number an article from some practical man on this subject, or give me some information by mail, you will much oblige a practical farmer and one of your subscribers.

J. C. Sisson.

Hartford, Ct., Dec. 16, 1850.

Remarks.—Among the grains generally raised in this section of the country, Indian corn possesses the greatest fattening properties. This would doubtless be much more valuable for grinding, and cooking—making it into hasty-pudding—would also add much to its value. Sheep and cattle will fatten fast on ruta baga turnips, carrots, or parsnips.

If sheep are fed on cooked meal, in a moist state, or meal mixed with water, or on roots, they will need but little water, but if fed on dry fodder and grain or meal, they will need much water; under any course of feeding, we think they should have a good supply of pure water, and they should have constant access to it, to prevent their drinking to excess.

When animals are fed on oil meal, called also linseed oil cake, it should be soaked and diluted in water, and then it will create thirst, notwithstanding much water is taken with a small quantity. This substance possesses great fattening qualities, and, in small quantities, it keeps animals in good condition. It is only adapted to animals of hard fat, such as horses, cattle and sheep. It is not good for hogs, and probably not for fowls.

We copy the following articles on the fattening of sheep in cold weather, from a late work by Henry J. Canfield, Salem, Ohio:

In fattening sheep to the best advantage in winter, it is necessary that they should have good shelters, and that these shelters should often be supplied with fresh litter, so as to make them quiet and comfortable; and, also, that proper allowances of food, water, and condiments should be regularly supplied to them.

The observations of Mr. Spooner will illustrate this subject as follows: "Quietude and warmth contribute greatly to the fattening process. This is a fact which has not only been developed by science, but proved by actual practice. The manner in which these agents operate, is simple, and easily explained. Motion increases respiration, and the excess of oxygen thus taken, requires an increased quantity of carbon, which would otherwise be expended in producing fat. So, likewise, *cold robs the system of animal heat;* to supply which, more oxygen and more carbon must be employed in extra combustion, to restore the diminution of temperature. Nature enforces the restoration of warmth, by causing cold to produce both hunger and a disposition for motion, supplying carbon by the gratification of the former, and oxygen by the indulgence of the latter. The above facts are illustrated by Lord Ducie:

"One hundred sheep were placed in a shed, and ate twenty pounds of Swedish turnips each, per day; whilst another hundred, in the open air, ate twenty-five pounds each, and at the rate of a certain period, the former animals weighed each thirty pounds more than the latter; plainly showing that, to a certain extent, *warmth is a substitute for food.* This was also proved, by the same nobleman, in other experiments, which also illustrated the effect of exercise.

No. 1. Five sheep were fed in the open air, between the 21st of November, and the 1st of December. They consumed ninety pounds of food per day, the temperature being 44 deg.; at the end of this time, they weighed two pounds less, than when first exposed.

No. 2. Five sheep were placed under shelter, and allowed to run at a temperature of 49 deg.; they consumed at first eighty-two pounds, then seventy pounds per day, and increased in weight twenty-three pounds.

No. 3. Five sheep were placed in the same shed, but not allowed any exercise; they ate at first sixty-four pounds, then fifty-eight pounds, and increased in weight thirty pounds.

No. 4. Five sheep were kept in the dark, quiet and covered; they ate thirty-five pounds per day, and increased in weight eight pounds."

A similar experiment was tried by Mr. Childers. M. P. He states, that eighty Leicester sheep, in the open field, consumed fifty baskets of cut turnips per day, besides oil cake. On putting them in a shed, they were immediately able to consume only thirty baskets, and soon after but 25, being only one-half the quantity required before; and yet they fattened as rapidly, as when eating the largest quantity.

From these experiments, it appears, that the least quantity of food, which is required for fattening, is, when animals are kept closely confined in warm shelters; and the greatest quantity, when running at large exposed to all weather. But, although animals will fatten faster for a certain time, without exercise than with it, if they are closely confined for any considerable time, and are at the same time full fed, they become, in some measure, feverish; the proportion of fat becomes too large, and the meat is not so palateable and healthy, as when they are allowed moderate exercise, in yards or small fields.

As to the kinds of food which may be used most advantageously in fattening, this will generally depend upon what is raised upon the farm, it being preferable, in most cases, to use the produce of the farm. Sheep prefer beans to almost any other grain; but neither beans or peas are so fattening, as some other grains; and are used most advantageously along with them. Beans, peas, oats, barely, rye, buckwheat, &c., may be used along with Indian corn, or oil cake or succulent food, making various changes, and mixtures, in order to furnish the variety of food, which is so much relished by the sheep, and which should ever be attended to by the sheep fattener. This will prevent their being cloyed, and will hasten the fattening process. A variety of food, (says Mr. Spooner) operates like cookery in the human subject, enabling more sustenance to be taken.

The quantity of grain or succulent food, which it will be proper to feed, will depend upon the size, age and condition of the sheep, and judgment must be used, in ascertaining how much they can bear. Mr. Childers states that sheep (New Leicester) fed with the addition of half a pint of barley per sheep, per day; half a pound of linseed oil cake, with hay, and a constant supply of salt, became ready for the butcher in ten weeks; and gain of flesh and tallow, thirty-three pounds to forty pounds per head. (One sheep gained fifty-five pounds in twelve weeks.)

This experiment shows what is about the largest amount of grain which it is necessary or proper to feed to New Leicester sheep, at any time while fattening. The average weight of forty New Leicester wethers before fattening, was found by Mr. Childers to be one hundred and twenty-eight pounds each. By weighing an average lot of any other kind of sheep, which are to be fattened, and by reference to the table of comparative nutriment of the different kinds of food, a calculation may be readily made, as to the largest amount, which will be necessary for them, of any article of food whatever.

When sheep are first put up for fattening, they should be sorted, when convenient, so as to put those of the same age, size, and condition, each by themselves, so that each may have a fair chance to obtain its proportion of food, and may be fed the proper length of time.

They should be fed moderately at first, gradually increasing the quantity to the largest amount, and making the proper changes of food, so as not to cloy them, nor produce acute diseases of the head or intestines, and never feeding so much as to scour them.

Sheep, when fattening, should not be fed oftener than three times a day, viz: morning, noon, and evening. In the intervals between feeding, they may fill themselves well, and will have time sufficient for rumination and digestion; these processes are interrupted by too frequent feeding. But they should be fed with regularity, both as to the quantity of food, and the time when it is given. When convenient, they should have access to water at all times; otherwise a full supply of it should be furnished to them immediately after they have consumed each foddering.

When sheep become extremely fat, whether purposely or not, it is generally expedient to slaughter them. Permitting animals to become alternately very fat and lean is injurious to all stock. Therefore, if animals are too strongly inclined to fatten at an age when wanted for breeding, their condition as to flesh should be regulated by the quantity and quality of their food or pasture.

For the New England Farmer.

VENTILATION OF POULTRY HOUSES.

Mr. Cole:—At this season of the year when the domestic poultry is put into winter quarters a few remarks upon the importance of ventilation in poultry houses may not be out of place.

Many persons have, within the past year, erected poultry houses with the view of keeping their poultry so warm and *comfortable* that their hens *must* lay eggs during the coldest weather; but in the construction of their houses they have overlooked or forgotten that ventilation is quite as necessary as warmth, for the health and comfort of fowls.

A few weeks since a person residing in the vicinity of this city, who has erected an ornamental and commodious house for his poultry, complained to me, that for the last month his hens had not furnished him with any eggs, although he supplied them with all kinds of grain, animal food, gravel, lime, water, &c.

The poultry house was so constructed that the fowls had the benefit of the sun whenever it shone, the southern side of the house being of glass. The floor was laid in cement so that no vermin could enter it, and covered with gravel several inches thick, and to guard against the cold the house was made as tight as possible. Notwithstanding these cautions the fowls did not thrive, for the simple cause; their owner had neglected ventilation. He has since made two ventilators, one at each end of his building, the fowls have begun to lay and now furnish as many eggs as their owner needs for the use of his family.

With regard to the management of domestic fowls,

their food &c., I can do no better than state the method adopted by Mr. A. H. Gilman of Portland, Maine.

Mr. Gilman is a person possessing good taste and an enlightened and liberal mind, and by judicious selections, is in possession of superior specimens of the best kinds of fowls in the country. The fowls exhibited by him at the late show of the New England Society for the improvement of domestic poultry, give evidence of the skill and care bestowed upon them. There were but few, very few fowls at that exhibition which equalled those shown by Mr. Gilman, and there were none that excelled them. The system pursued by Mr. Gilman in the management of his fowls is most excellent. His poultry house is so constructed that each kind or breed of fowls have separate roosting places under the same roof, and a separate yard or walk, so that there is no chance of one breed being crossed by another.

The house is perfectly ventilated, having been built by Mr. Gilman, after a plan conceived by himself. The lower story is without floor, and in it are placed the nests, separated into wards for the different breeds, each ward opening to its respective walk or yard. A hen ladder extends from each ward to the corresponding roosting place in the second story. The floor of the second story does not extend to the ends and sides of the building, but the space of one foot is left uncovered for the purpose of securing good ventilation. The yards or walks are covered in part with gravel, and each yard has plat of grass growing in it.

Each yard is furnished with a constant supply of water and all kinds of grain, vegetable and animal food; lime and pulverized bones are always within the reach of the fowls. The house and yards are carefully swept, and every particle of excrement and filth is removed daily, and the building and fences are washed with a solution of lime every week.

Whenever the hens show an inclination to incubate, their desires are gratified, and when convenient each hen incubates her own eggs.

By pursuing this course Mr. Gilman has been amply repaid for the care and attention he has devoted to his fowls, and has the satisfaction of being more successful in rearing the different breeds in his possession, than most of the breeders and fanciers have been. I have been thus particular in describing the system adopted by Mr. Gilman, in the hope that others will pursue it, and find it as advantageous to them as it has been to him.

Yours, &c. S. Bradford Morse, Jr.

Remarks.—It is for want of ventilation, that fowls are so often affected with the roup, or catarrh, which is a very severe, and frequently a fatal disorder. We sometimes take the roost out of our poultry house in summer, and make the fowls roost out door, with some boards over them to keep off the storms. This gives them a free air, as the boards over them does not impede the circulation.

☞ One of the most remarkable facts in the diet of mankind, is the enormous consumption of tea and coffee. Upwards of 800,000,000 pounds of these articles are annually consumed by the inhabitants of the world.

For the New England Farmer.

CULTIVATION OF CRANBERRIES.

Mr. Editor:—Dear sir—Much has been said and written on the subject of raising that delicious fruit that is now considered an indispensable article in every family, the *cranberry*. Having taken particular notice of the plant and its fruit for the last three years, I will make some remarks, as they have occurred to me. It has been often said that it was advisable to flow the meadows or bogs to get a good crop. Now my experience has not proved it to be useful to flow the meadows. I have found that the fruit has been better, and less liable to be injured by frost, when it was not covered with water during the fall, winter and spring.

I have come to the conclusion that it only makes the vines tender, as the water is usually drawn off in April, or the first of May; and in such meadows the vines are put back, and if not injured in blossom, are likely to be injured when the fruit is green in September. I have never known the fruit injured on the upland or meadows where the water did not stand. But my fruit never escapes injury from the frost on my low meadows, especially when in wet and unfavorable seasons the water remains on the meadow late, and it is flowed in time of freshets. So I prefer not to have my cranberry plats covered with water any part of the season.

Since I have drained my meadows, I have more than doubled the quantity of fruit, and if I could prevent the water from coming on at all, I think I should have no cranberries injured by the frost. I have furthermore observed that when I spread sand or mud on the meadows, the vines grow much stouter and the berries larger; also on the edges and banks of ditches I find the best fruit, and more of it, without injury from heat or cold. I think the more cranberries are cared for by spreading mud, sand or gravel on the vines (I mean a slight coat so as to cover the old dead grass and stubble,) the greater and safer will be the yield. It appears to me that they want cultivating as much as corn or potatoes.

Yours most truly, S. A. Shurtleff.

Spring Grove, Dec. 2, 1850.

Remarks.—The subject presented by Dr. Shurtleff is very important. Some cranberry growers continue the water upon their vines till the first of May, in order to retard the season of blossoming until the weather has become permanently warm. The evil effects of their course is shown by the above interesting communication.

We now present to cranberry growers a very important subject for investigation. Will cranberries flourish as well without being covered with water in the winter? A few years ago, Dr. Brown, of Wilmington, showed to us his cranberry grounds, which were flowed by a mill pond in winter. He showed the line to which the water flowed in the winter, and there were cranberry vines above and below that line. Below the line there was an excellent crop of fruit, even on extremely poor, dry and gravelly soil; but above the line of water there was no fruit. We solicit facts on this subject. Ed.

For the New England Farmer.

HUSK BEDS.

No one who has not tried them, knows the value of husk beds. Straw and mattrasses would be entirely done away with, if husk beds were once tried. They are not only more pliable than mattrasses, but are more durable. The first cost is but trifling. To have husks nice they may be split after the manner of splitting straw for braiding. The finer they are split the softer will be the bed, although they will not be likely to last as long as when they are put in whole. Three barrels full, well stowed in, will fill a good sized tick, that is, after they have been split. The bed will always be light, the husks do not become matted down like feathers, and they are certainly more healthy to sleep on.

Feather beds ought to be done away with, especially in warm weather. For spring, summer and fall, husk beds ought to be "all the go," and such undoubtedly will be the case, when they are once brought into use. There is no better time to procure husks than when corn is being harvested, and the husks will be much nicer and cleaner when corn is cut up at the bottom, and put in stooks. They do not become so dry and weather-beaten. It is calculated that a good husk bed will last from twenty-five to thirty years. Every farmer's daughter can supply herself with beds (against time of need) at a trifling expense, which is quite an inducement now-a-days,

Smithfield, R. I. A. T.

Remarks.—As the article here recommended, is valuable, as attested by many who have tried it, the subject should receive more attention, particularly as it is abundant on every farm, and of trifling value for other purposes, compared to its value for beds. It is clean, wholesome, cheap, and excellent; much superior in many respects to foreign high-priced articles. Ed.

For the New England Farmer.

CARROTS FOR HORSES.

S. W. Cole, Esq.:—*Sir*—I observe an article in the N. E. Farmer of last week, on the nutritive qualities of carrots, as winter food for horses; a circumstance which does not appear to be generally understood among farmers and others keeping horses. In some districts of Scotland, especially Aberdeenshire, and the light sandy countries on the eastern coast, carrots are grown entirely as food for horses, and are a very abundant and profitable crop, producing from twenty-five to thirty tons per acre, and farmers can afford to keep their horses in excellent condition on carrots and hay, who could not afford to give them any thing else.

This species of food however, is not confined to farmers alone, as richer gentlemen's carriage and riding horses are similarly fed. And, as your article states, the horses fed in this way have a finer appearance, and better health, than those fed on oats or other kind of grain. And many gentlemen give their horses a daily supply of carrots, solely with the view of keeping the hide soft, and the hair glossy and smooth.

The way in which they are prepared for the horses is somewhat as follows: The carrots are topped, washed, and cut up with a turnip cutter, (when one is on the farm, if not they are cut up in pieces with the hand,) then mixed with equal portions of cut hay, and scalded, or what is better, on some farms they are steamed, a quantity of salt is mixed to season the food and when cool it is given to the horses in the requisite quantities. I have known many horses which were fed every winter on this kind of food, and healthier and better looking horses could not be found.

In some places on the eastern sea shores of Britain, large crops of carrots are grown in the drifted sand, and are the finest carrots that are met with in the markets, and though the drought may be greater here in summer, I still think that much more land could be profitably cropped with carrots, than is generally done. The light soils in many parts of New England are well suited to this crop, but there may be obstacles to their culture with which I am not acquainted.

Yours respectfully, R. B. Leuchars.

Remarks.—Carrots are not very liable to suffer from drought in this country. They will probably endure drought as well as any other crop, and much better than some crops. They may be cultivated to advantage on dry lands, even in dry summers, if the land be subsoiled. This process will enable the root to penetrate the soil deeply, so that there will be a constant supply of moisture.

For the New England Farmer.

FLOWERS, THEIR INFLUENCE, &C.

Mr. Editor:—It is a prevailing opinion among a certain class of farmers, that the cultivation of flowers is fit only for ladies, and beneath the notice of any man of business or enterprise. From this, I must beg leave to dissent. I am ready to admit the superior taste and skill of the ladies in this department of horticulture, but I am not willing to grant them exclusive jurisdiction; neither do I perceive wherein man lowers his dignity, in cultivating what it was not beneath a God to create in such infinite variety. While we have the sentiment of ideality implanted within us, I hold it to be as much our duty to afford the means for its gratification, as it is to furnish ourselves with food. Not that I undervalue the every day labor of the farmer, far from it; but every farmer has sufficient leisure to cultivate, and ample space for, a few flowers of easy culture, which may be obtained with little or no expense from the forests and meadows, or from the gardens of his neighbors; and by the way, those whose grounds are ornamented with flowers, are almost invariably not only willing, but happy to furnish plants and seeds to those who will take the trouble to cultivate them.

I have seldom known it fail, that those who consider floriculture beneath their notice, annually allow a space amply sufficient for a fine variety of the most beautiful flowers, to be occupied by the most worthless weeds, and sometimes even *plant* their gardens, in part, with that poisonous weed, tobacco, and employ an hour or two in a day in smoking or lounging about. Now is there any one who will deny that a well regulated patch of flowers is a greater ornament to a garden than this strange confusion of weeds, briars and tobacco? And permit me to ask, would it not be much more conducive to both physical and mental health, and ac-

tivity, besides being a much more agreeable employment to occupy half an hour in a day in planting and attending to these flowers, than to doze it away in your chair or in the shade!

The influence, too, which flowers exert on the character is not to be overlooked. The Grecians and Romans, it is said, attributed much of the greatness of their best orators to the influence of the sublime and beautiful scenery by which they were surrounded in youth; and to the mingling of the sublime and beautiful, in the scenery of the new world, some have ascribed much of the eloquence of our own land. Nature has certainly done enough for New England in her lofty mountains and deep valleys, and all that she requires to complete the scene, is the hand of taste to exhibit itself in the decorations of her gardens, and country residences.

But the influence of flowers, in refining and elevating the moral character, is more plainly visible, especially with children. Let parents surround their dwellings with flowers and shrubs, and arrange them in a neat and orderly manner, and my word for it their children will generally prefer watching their growth and admiring their beauty to mischievous pranks and quarreling with each other.

Another inducement to the farmer offered by floriculture, is the superior knowledge of the laws by which nature regulates the growth and perfection of plants, which he gains by a close observation of the various causes operating to increase or retard the growth of those of all varieties, from the most tender to the most hardy, which will necessarily attract his attention.

I might add much more of a similar nature, but I will not trespass further on your patience at this time. I may however in a future number give some directions for transplanting wild flowers and the selection of hardy varieties of cultivated plants to aid those whose experience is less than mine.

Ashfield, Dec. 23. W. F. B.

Remarks.—As nothing is made in vain, flowers are for some valuable purpose, and what can that purpose be but to be admired for their beauty, their fine colors and fine forms, their beautiful structure, order, regularity, and symmetry, affording delight and instruction to those who cultivate them and study their nature, and their numerous metamorphoses and novel productions under the plastic hand of skilful culture.

For the New England Farmer.

"EFFECTS OF FOOD ON MILK."

Mr. Editor:—Your correspondent, Mr. Weeks, (Vol. 2, p. 381,) wishes to know how to prevent milk tasting of turnips, &c., when cows are fed on them. That the food of cows has an influence on their milk and butter must be conceded. I have known oxen brought from the interior, and on eating freely of salt hay, and being slaughtered soon, the beef had a very disagreeable taste; while cattle kept near the sea, and fed on all kinds of fodder, and as much as they could eat of salt hay, made the very best of beef. A full and sudden change of food will affect both milk and beef, while a gradual change will have no effect on either.

I once fatted a young cow on cabbage. I was told that the beef would taste of the food. A few days previous to slaughtering her, I fed her on hay, potatoes, and a little Indian meal. The beef was excellent.

A cow or horse may eat any quantity of apples or potatoes, with other food, if gradually accustomed to them. But if freely fed on these articles at once, they would be ruinous.

Yours, &c. M. French.

East Salisbury, Dec., 1850.

Remarks.—By milking cows, and then feeding with turnips, &c., so that they may eat them as long as possible before milking, there will be less influence of the food on the milk. The free use of salt on roots fed to cows, will in some measure prevent unpleasant taste in the milk.

SHRINKAGE OF CORN.

Knowing that a great difference of opinion exists among farmers, as to the loss of corn by shrinking or drying, from the time it is cribbed in the fall, till spring—say the latter part of March, I determined to satisfy myself on this point—at least so far as a single experiment could determine.

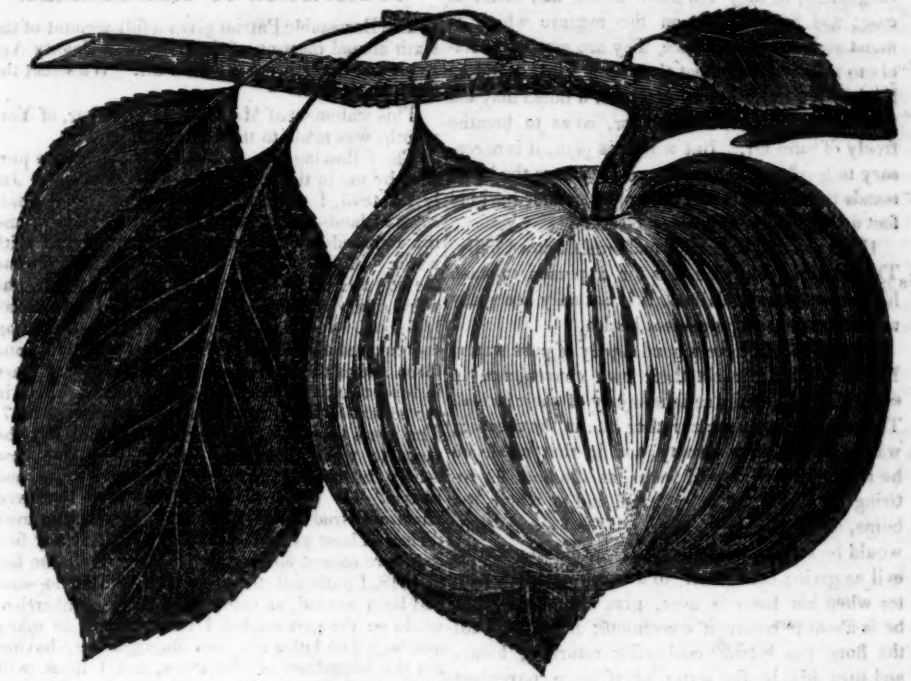
On the 23d of November last, the day on which we finished the husking, I measured two bushels of ears in a standard bushel, as accurately as I could. I then weighed each bushel, found the weights 43 1-2 lbs. respectively. The number of ears, 58 in one, and 50 in the other. I had one parcel shelled and got 33 1-2 lbs. by weight, and half a bushel and half a peck by measure, and 10 lbs. of cobs. The corn was spread in a dry, airy place, where it remained till a few days since when it had lost just half a peck or fifteen per cent. by measure, and a fraction over 3 lbs. or ten per cent. in weight.

This shows a difference of ten per cent., between the loss by weight. How is this difference to be accounted for? It was owing to the minute division of the water in the corn, that while we find a loss in weight that should occupy a space less than three pints, there is an actual loss of eight pints in bulk. The cobs of this parcel were accidentally destroyed; so that I was prevented from ascertaining the loss of cob.

The other bushel of ears was kept in a dry, airy place, and shelled a few days ago, and gave just a half a bushel of corn, weighing 30 1-4 lbs.

These are the facts, as gathered from my small experiment. The corn was a variety of the white, between the Gourd seed and Flint—a mixed variety having from ten to twenty-six rows. The corn was in good condition for housing at the time we finished husking.—*Albany Cultivator.*

Consumption in Horses.—Mr. Percival, the English veterinarian, says, "*pulmonary disorders carry off more than all other diseases.*" Though this is probably an over-estimate of mortality from that source, when we consider how much sudden changes of temperature and checked perspiration injure man, why may we not suppose that many horses are killed by it, and hence we should perceive and act upon the propriety of attending more to the condition of the horse when turned out or otherwise exposed to sudden change from heat to cold. The Spaniards have a saying that a *draft* of air "that will blow out a candle will kill a man;" but we think nothing of putting a horse, however much heated, in a stable with a draught of cold air coming on him from without.



GRAVENSTEIN APPLE.

This is one of the handsomest and best apples cultivated in this country, and one of the very few foreign kinds that are worthy of general cultivation. The Gravenstein originated in Holstein, Germany, and it received its name from the castle in which it was found. It is regarded as the finest apple in its native country, it is also very popular in England. It flourishes well in nearly all parts of this country, where the apple is cultivated.

The Gravenstein is an early fall apple in this section, but in the North it is a late fall and early winter fruit, and it seems admirably adapted to the North. Colonel Henry Little, of Bangor, Me., well known for his zeal and intelligence as a pomologist, informed us, that he grafted a tree to this kind, and in ten years it produced twenty bushels of excellent fruit, that kept till early winter.

This variety is a very good grower, and it forms a large handsome tree, it is also very productive. The fruit comes in at the same time as the Porter, a very popular apple in this market, and like that variety, it combines properties both for the dessert and kitchen. But it has some advantages over the Porter. It is a better grower, and although it ripens about as early, it keeps longer, and it is not likely to assume a bad appearance from bruising like the Porter.

The Gravenstein is large; flattish-round; the skin very smooth and fair, of a white yellow ground, mostly covered with brilliant red, generally in stripes; stem short, rather stout, in a deep, rather broad, and somewhat uneven cavity; calyx, large, open, in a wide, deep uneven basin; flesh whitish, very juicy, crisp, of a high sprightly, vinous flavor; rather acid early in the season, but when fully ripe and mellow, it becomes mild and pleasant. It is excellent both for the table and for cooking. In use during September and October, in this region.

CARE OF HORSES.

To go fully into this subject, would require a whole volume, yet a few hints may be useful to some of our readers. Those persons who are constantly taking care of horses, are generally faithful and intelligent, and manage well. The horse is most neglected by the farmer who, in the winter, has but little for him to do, and spends but little time—often too little—in taking care of him.

The standing of the horse is too much neglected, or this subject is not judiciously managed either by the professed groom or the farmer. The horse is often allowed to stand in the stable, on a hard floor, with his fore feet considerably higher than his hind ones, constantly straining his muscles. The floor on which horses stand, should only slant one or one and a half inches in eight or nine feet, barely enough to conduct off the liquid manure.

Some farmers turn their horses into a pen, and let them stand as they please. This is a good ar-

rangement, as they can move about, and stand at ease; and by standing on the manure which is moist and soft to their feet, they are much less liable to injuries in the feet than horses that stand on hard floors. By this arrangement a horse may eat from a trough by the barn floor, so as to breathe freely of pure air. But with this plan, it is necessary to level the manure frequently where the horse stands to eat, else it will accumulate under his hind feet and give him an uneasy position.

Horses should be curried and brushed down daily. This is as necessary as it is for a person to wash his face and hands daily. It is not only necessary to comfort, but to permanent health.

Horses should have a good supply of pure water. Farmers often consult their own convenience in supplying this, to the serious injury of their horses. The animal comes home rather late in the evening, warm, and perhaps sweaty, and in that condition he is supplied with cold water, as the hour for retiring for the night is at hand, and to water the horse, as the saying is, after he has become cool, would be very inconvenient. To avoid so great an evil as giving cold water to a warm horse in winter when his labor is over, give him water when he is about to return, if convenient; if not, wait till the horse has become cool, after returning home, and turn him to the water, or if more convenient carry some to the stable. If a little hot water can be added to the cold, he may have drink without waiting; or moistened food may be given to him, so that water will not be so necessary.

There is one thing in which many farmers are negligent in the care of their horses. They feed their whole stock early in the evening, and they do not go to the barn again for the night. When the horse has eaten his supper of dry fodder, he is very thirsty, but he has no drink, and suffers greatly for want of it. The next morning his thirst has abated, by an equalization of moisture in the system, and he has become hungry, and is looking for his breakfast, so he will not drink frequently, in the morning, though water is offered. It is but little trouble to turn the horse to water, about nine o'clock in the evening, and it should be attended to. If the food be cut and moistened, as now practised by many, it will be, in a great measure, a remedy for the evil.

When the horse is out keep him well covered, while standing in the cold, especially after hard driving, or when warm; and put a blanket on him on being put into the stable when sweating. Never wash a horse's legs in cold water when he is warm, not even in hot weather. Cold water may be used for inflammations, but only when the horse is still and cool.

American Axes are so much superior to the British that they are sent to Liverpool, and sold in competition with the English manufacturer.

CULTIVATION OF CRANBERRIES.

The Barnstable Patriot gives a full account of the sixth annual meeting of the Barnstable County Agricultural Society, on the 16th ult. We select the following report:—

This statement of Mr. Edward Thatcher, of Yarmouth, was made to the committee on fruit.

The following is a statement of the course pursued by me in the cultivation of the cranberry. July 12, 1845, I purchased, for $40, one and a half acres of land—about one-half a sandy beach, and the remainder a low peat meadow covered with water. A rim of about six feet in width, around the bog and between the water and the beach, had a few cranberry vines on it, which had been closely fed off. In the spring of 1846, I drained the bog and covered about one-eighth of an acre with sand three inches thick, and set it with cranberry vines in rows two feet apart, and hoed them four times in the season of 1846, and once in the spring of 1847. The grass then got advantage of me, and left the vines to work their own way. They have now nearly overcome and worked out the grass and rushes. On the remainder of the bog I strewed vines, and trod them in the mud, by walking over them. These grew with rapidity without any further care except flowing in the winter. In the fall of 1848, I gathered from ten rods, where no sand had been spread, as many bushels of cranberries, while on the part sanded I had scarcely as many quarts. The latter are now doing better, having got the advantage of the grass, and I think will finally work it out. I have this year, on the quarter of an acre offered for premium, quite a good crop, although the worms destroyed nearly one-half. I have picked one square rod of the light-colored variety, set in the mud, and it yielded two bushels and twelve quarts. One square rod of the small, dark-colored variety, on the mud, yielded one bushel and two quarts. The large red variety yielded on the mud two bushels to the square rod. The whole quarter is not yet gathered; it will yield about thirty-five bushels, about one-half of the vines being set on mud and one-half on sand.

In selecting meadow for cranberries, it is highly necessary to select such as will not dry in summer; but much also depends on the selection of the vines, as the committee will see by the samples here presented, all having the same soil and the same treatment. The *samples are not selected, but sent in precisely as they grew.* The whole expense on the above bog up to the present time does not exceed $40.

I have received from the sales of cranberries, up to the fall of 1849,		$320 00
Deducting for, picking one fourth	80 00	
All other expenses for setting, interest, &c.,	40 00	
	——	120 00
Net profit,		200 00

Edward Thatcher.

Yarmouth Port, Oct. 15, 1850.

We know not why it is that so little attention is paid to the cranberry in this county. In the eastern part of the State it is considered a valuable crop, and one raised without difficulty. There is a great abundance of land in almost all our towns, and especially all those bordering on the Housic or

Housatonic rivers, well adapted to this fruit. Indeed, and ground which will produce corn, it has been said, will produce good cranberries. Still their native place seems to be in low grounds. That its cultivation is profitable, there can, as we think, be no doubt. Nor is there any danger of an oversupply. The price might become less, but improved methods of culture and implements for gathering would enable the article to be afforded at a lower price; and if that was the case, the consumption would increase with the supply. We should like to see some of the grounds which are now completely worthless producing their fifty or one hundred dollars per acre, in cranberries. We should like to see the hardhack give place to the cranberry, having the utmost confidence that it could not be less profitable.—*Berkshire Culturist.*

PROPER TIME FOR FELLING TIMBER.

Mr. William Painter, of Concordville, Pa., in a letter written for the Patent Office Report, says: "During an experience of more than forty years as a plain practical farmer, I have taken much interest in ascertaining the best season for felling timber; and I now state, with much confidence, that fencing timber, such as all kinds of oak, chesnut, red hickory, and walnut, cut from the middle of July to the last of August, will last more than twice as long as when cut in winter, or common barking time in spring. For instance cut a sapling, say five or six inches in diameter, for a lever, in the month of August, and another of a similar size and quality, in winter or spring, and I *know* that if the first is stripped of its bark (which at that time runs well, it will raise as a lever, at least *twice* the weight that can be raised by the latter."

Statements like the above, made by reputable men who can have no motive to misrepresent facts, are always entitled to a respectable consideration. Why should a green "sapling, six inches in diameter, cut in August," be any stronger after it is well seasoned, then it would be cut in winter or spring?

While we doubt the fact of the difference being so great as Mr. Painter thinks that he has good reason to believe it to be, we do not question that there is *some* difference. The woody fibres of the tree are the same in August and in winter and spring, the new layer of wood, *alburnum*, is thin and comparatively small, and most of this is deposited before August. The proportion of sap or water in a green tree, varies but little in different seasons of the year, as compared with its dry matter. What, then, is the exact difference in timber in autumn and in spring, after a tree has put forth its leaves, and its terminal branches are rapidly extending by the deposition of the new wood? When is the matter organized which flows as *sugar* dissolved in water, from the sugar-tree in the spring, before even the buds begin to swell? In what condition, and in what place does the saccharine substance spend the time from autumn till March? Mulder, in his valuable work on the "Chemistry of Vegetable and Animal Physiology," says that all sugar is first formed into starch from carbon and water; and that it is from this starch that both sugar and new wood, in spring, are produced. We are aware that other chemists have taken a different view of this subject, but we believe that Mulder is right. We know that fat in animals is a sort of store-house of fuel which the animal can burn when its food is lacking or deficient to maintain vital warmth. Potatoes, and many other plants possess unequal quantities of starch at different periods and under different circumstances. A green sapling in the spring, has all its starch and *albumen*, or the raw material for making a vast number of leaves, much new wood, and its tissues, in which nitrogen is consumed, taken out of its trunk and distributed in thousand of branches, and in terminal buds. That the trunk should be a little weaker when thus deprived of all its soluble solids, is no more than we might reasonably expect. To transform starch, which is insoluble, into soluble dextrine, sugar or gum, is the effect of the first warmth of spring, or winter, for in many States maple sugar is made in January and February.

If the above view of this interesting question is founded on true physiological principles, as we believe it is, then the best time to fell a tree is after it has ceased to grow in autumn, and prepared, like a fat bear in the fall, a good supply of starch and nitrogenous compounds, in all its sap-tissues, for use when it is ready to put forth a new covering of luxuriant foliage. There is strength in the elements of forest leaves, and these elements while deposited in the cells of sap-wood, if dried therein, increase its durability. Dry rot is a fungus which destroys a great deal of ship and other timber. Whatever operates to exclude atmospheric air, tends to prevent this malady. Several minerals, like copperas, corrosive sublimate and blue vitriol, will kill the fungus called "dry-rot." Exclude oxygen from wood and it cannot decay. Painting preserves it on this principle.—*Genesee Farmer.*

Remarks.—This is a subject on which we have had line upon line, and various opinions founded on experiments which have given different results; and yet, the subject is not definitely settled. We have often heard a very intelligent carpenter say that timber cut in June, when the bark runs freely, is better, and heavier for plain stocks, than that cut in any other season. He also observes, that he found such timber very durable. But the timber that he used was in small pieces, and it was thoroughly seasoned, so that it was not liable to dry-rot, like large timber that is not readily seasoned.—Ed.

DOMESTICATING FOWLS.

Mr. Freas:—To render poultry raising profitable, it is essential that great care and circumspection be exercised, not only in the selection of valuable "breeds," but in feeding and rearing the young. If the raiser is remiss in these points, no profit will result from the enterprise, and as a general thing he will, to adopt an old adage—"Have his labor for his pains."

There is a vast difference in fowls, and while some are hardy and profitable, others are weakly and scarcely pay their way under the most favorable circumstances, and the best management possible to bestow. It is always a judicious plan for the farmer to keep a number of fowls, of some kind, upon his premises, as there is always enough waste or refuse matter to feed them, and beside, they are serviceable in protecting the crops by destroying the numerous insectiverous depredators, which in the

spring and summer months prey so voraciously on the youthful and more tender plants.

A hen with a dozen chickens—the hen being confined in a coop, and the coop placed in the vicinity of the kitchen garden, will do more to secure the preservation of the vegetables than a man; they not only keep the insects from destroying the tissues of the plants, but they annihilate the insects themselves, and convert them into a source of profit instead of a loss by devouring them as food. When one is suitably located, the keeping of all kinds of fowls—hens, turkeys, ducks, geese, &c., will be found profitable. It will bring many dollars in the course of the season, and ensure a constant and liberal supply of eggs and poultry for domestic use. These products always command a ready sale and a high price in most of the markets of this country, and bring cash, where little can be obtained for the products of the field. In the New England States, and especially in Maine the egg and poultry business has attained a degree of consideration and importance to which, probably, it has not reached in any other State of the Union. Standing in the door-way of a shop in one of the interior villages of the latter State, a large load passed, and on inquiring the character of the lading, I was informed that it consisted of 26,000 dozen of hen's eggs. They were going to the Portland market, and thence probably, to the cities of the west.

A New Englander.

Near Claremont, N. H., Nov. 10, 1850.

Germantown Telegraph.

A PROFITABLE CROP OF CORN.

We often hear it said that Indian corn is not a profitable crop in this part of the United States. Undoubtedly there are many fields of corn not only in New England, but in every part of the Union, which if debt and credit were kept with them, it would be found that they run their owners in debt, but in most cases it is the fault of the owners rather than that of the corn.

In conversation, not long since, with Samuel Moody, Esq., of Lisbon, well known in his section of the State as a careful business man and successful farmer, he related the results of his labors this past summer in raising corn.

He had come into possession of a piece of land containing twenty acres—some part of which, say one-half, cost him thirty dollars per acre. It was a warm loamy soil; he ploughed it up and manured it well, and planted it to corn, last spring, or rather summer, for the season was so wet that he did not finish planting till June. He hoed it well twice. In the fall he gathered it, husking or picking the ears in the field, leaving the stalks and husks to be ploughed in again. From this field he gathered *nineteen hundred bushels* of good, sound ears of corn. There can be no doubt that each bushel of ears would make half a bushel of shelled corn. At any rate, it will be safe to say that there are eight hundred bushels of good, sound, shelled corn. Mr. Moody says that reckoning the price of the corn at its present market value in his neighborhood, it will pay him for what he gave for the land, pay him the interest on this cost—pay the taxes, pay for the manure and all the labor attending the crop, except the hauling of the manure. This, all will allow is a profitable crop of corn.

He is trying the experiment of burying the stalks and husks again in the soil, by the aid of the plough, and thinks he can convert them into suitable manure for his crop, at a cheaper rate than by the ordinary process of feeding them out to his cattle. We know of one or two farmers who pursue this mode, and think it a very good plan. Perhaps it may do better than the ordinary method, which is to toss them over to the cattle the first part of the winter, who eat a part, and tread the greater part under foot. Yet there is a good deal of nourishment in this kind of fodder, if one had time to pass it through a straw cutter, and then subject it to the softening process of steam or warm water. Corn has done extremely well during the past season, all over the State, and yet we hardly know when it grew. The spring was very wet, and it was consequently put in very late. The summer was, in the main, a wet and cool summer,—and yet the corn pushed along, and, as the autumn was mild with but little frost, corn ripened off well.—*Maine Farmer.*

PIPES FOR WATER.

Eds. Cultivator:—I noticed in the July number of the Cultivator the inquiries of a correspondent, desiring information on the subject of laying water-lime pipe to conduct water for common watering purposes, and asking what were the advantages and disadvantages of this kind of pipe as compared with lead pipe, I could say nothing from personal experience, never having used any; but should suppose from observation that water-lime pipe was superior to lead for all ordinary purposes, where it is practicable to make it,—having the advantage of cheapness in construction and durability, if nothing else.

I have had some experience in making water-lime pipes, and can recommend them to any one who wishes to lay them, as being both cheap and durable. I will give my plan for making this kind of pipe, which I think is as good as any, or at least I know of no better. The tools necessary for this purpose are a common brick trowel, and a mould, the size you want the bore of the pipe. This should be turned in a lathe perfectly smooth and round, and of equal diameter at each end. Its length should be about two feet and a half, with a handle turned on one end, smaller than the rest, to draw by. The materials necessary in making the pipe, are good water-lime and coarse sand—the coarser the better, if sifted from the coarser pebbles. Have your drain dug to eighteen inches wide at the bottom so that there may be room to work with ease. In the middle of this drain dig a trench about four inches deep and from three to five inches wide, according to the size of the bore of the pipe, with a rounded bottom, if you choose, to save mortar. The advantage this trench has over the ordinary way of laying the pipe on the level with the bottom of the main drain will be seen at once. By using the trench you save considerable mortar, and the necessity for waiting for the mortar to dry before drawing the mould. If it were laid on the level, it would be necessary to wait for it to stiffen before you drew the mould, or it would flatten out. Mix your mortar, one part lime and three parts sand; make it as stiff as you can and have it spread well.

When you are ready to lay your pipe, commence by spreading a layer of mortar an inch or an inch and a half thick, in the bottom of the trench. This should be spread only the length of the mould at a

time. Lay the mould on this spreading of mortar, and then spread the mortar on the top and sides of the mould; press it down tightly, so as to fit the mould, on all sides; smooth it off with the trowel on top, and lay down another spreading of mortar; then take hold of the handle of the mould and roll it around so as to start it loose, and draw it out to within three inches of the end,—spread on another layer of mortar, and smooth it as before. So keep doing, until you have your pipe the length required. Be careful that you don't press with your trowel on the pipe above the end of the mould, or it may cause it to cave in, especially if the bore of the pipe be large. Let the pipe remain three or four days, until it gets hard and dry; then cover it up with earth. Be careful and not let any large stones fall on the pipe,—they will be apt to crack it. A pipe properly made in this way, will remain perfect as long as it is kept from the frost. R. A. Hutchinson. *Geneva, July 29, 1850.*

Albany Cultivator.

TO PREVENT SMUT.

Messrs. Editors:—I will give you my experience in preventing smut. About twelve years ago, on my farm in Brighton, I raised a field of wheat of about five acres, which was so smutty that I thought it would not pay for threshing; so I fed it out. But, as a matter of experiment, I threshed enough to sow the same field again. I soaked it all night in water strong with salt, and stirred it up and skimmed off all the smut and shrunk wheat that rose to the top. In the morning I rolled it in fresh slaked lime, and sowed it on the same field where it had grown; and I did not discover a head of smut in the field. I was much troubled with smut before this, having to wash most of my wheat before grinding; but since I have pursued this course, I scarcely ever see a head of smut in my fields. My neighbor, Mathew Dryer, was troubled in the same way—pursued the same course for two or three years—and got rid of the smut. These are facts, and important facts for the farmer. The question whether smut is caused by a *bug*, or some other cause, although a very interesting subject of inquiry to the curious, is of very little practical consequence as long as we know an effectual remedy, easily applied, and within the reach of all. I should of course prefer to sow clean wheat, if I could procure it readily; but I should sow smutty wheat that had been limed and brined in the way I have mentioned, with perfect confidence that the vitality of the smut had been destroyed, and that its effects would not be seen in the next crop. This confidence has been gained by my own experience, and my observation of its success among my neighbors. I had tried various remedies previous to this.—*Genesee Farmer.*

Brighton, N. Y., Hiram Robbins.

IDIOCY.

Dr. Enos Stevens, examining agent for the Massachusetts commissioners for the prevention and cure of idiocy has a manuscript work wherein occurs the following:—

"At Cambridge poor house, there are three well-formed and strong brothers, whose names are Joseph Cox, 23 years old, George Cox, 20, and William Cox, 18. These are all the children their mother had,—their father was a respectable mechanic, and has a very intelligent child by a second wife. The mother of those idiotic boys was a devoted, benevolent woman, who often took narcotic drugs, and went out whole days and nights to visit and assist the sick among her neighbors: leaving her own children all put asleep by laudanum, which is wine and opium.) Every day when they cried, and every time she wished to go out, she put them all asleep with laudanum. At length their whole organization assimilated to such a state of body and mind, and they have grown up to the size of manhood, with the avenues of their brains practically closed by drugs; so that they have merely infantile powers of mind and strength of bodies.

ASHES AND LIME FOR PLUM TREES.

I have in my garden a plum tree, which for three or four years past, has not any portion of the plums been sound.

They are all bored or rotted, and fell from the tree before they were ripe. Two or three other plum trees of a different kind, which have borne less, shared the same fate. Last year, a young tree which stood near an ash-leach, and which had never borne before, produced a solitary plum that was sound. This suggested the idea that its preservation was owing to the ashes which had been scattered around the roots of the tree. Following out the hint thus given, I last spring spread ashes and lime, with manure and salt around all my trees. The result has been, that they have all borne this year more than usual, and most of the fruit has been sound. This result I ascribe in part to the ashes and lime. The same I find is recommended by "An Old Digger." And the conclusion is obvious, that alkali enough will destroy the young insects as they lie burrowed in the ground, or attempt to emerge from it in the spring. If in this way sound plums can be raised, it will be found a very easy way. Let some of our readers try the experiment and note the result.—*Horticulturist.*

REMEDY FOR ASTHMA.

An individual who has suffered much from asthma, and who has in vain sought relief from regular physicians, wishes us to give publicity to the following remedy:

"Procure common blotting paper, and thoroughly saturate it in a solution of nitre (saltpetre,) and let it be carefully dried by the fire, or by exposure to the rays of the sun. On retiring at night, ignite it, and deposit it, burning, on a plate or square of sheet or zinc or iron in your bedroom."

In many cases, it is said, this has enabled persons painfully afflicted to enjoy their rest.—*Maine Cultivator.*

Hundreds of nights within the last five years, when the bitter pain widened the time in proportion as respiration became more difficult—hundreds of nights has the difficulty been lessened by a suspension of what seemed an almost interminable agony in the smoke of burning nitre. As a means of averting present suffering, the subscriber can recomend, from his own experience, the use of saltpetre almost identically prepared as above. Many times has he lain down in a smoke condensed seemingly to the smothering of a common healthy breather, and found relief from the worst suffering.—*Hon. Isaac Hill.*

Mechanics' Department, Arts, &c.

IMPROVEMENT.

In many branches of mechanical business, great improvements are making. Thousands of ingenious persons are constantly at work, devising, executing, and bringing before the public various improvements, and every mechanic should examine into every thing that is new appertaining to his trade, else he will find others going ahead of him, and gaining advantages from recent inventions.

Some mechanics think that there is no material change in their line, and they settle down to pursue through life the same old mode to which they have long been accustomed. But many make a great mistake in this way, and after awhile they wake up by finding themselves in competition with those who are availing themselves of modern improvements; and they find in the market cheaper, and perhaps better articles than their own; and then they start anew in the race under disadvantages compared with their competitors.

In every branch of business there are not only improvements, but changes for "bettter or for worse" are constantly going on, and those who depend for their success in accommodating their customers, must learn, not only the best way of preparing every article, but they must also study the influence of fashion, "whose controlling will none disobeys."

THE ELEVATION OF MECHANICS.

There is no class of our citizens, of whatever grade or profession, that are really so valuable in society as our enterprising and skilful mechanics. As individuals and citizens, in point of intelligence, virtue and usefulness, they occupy a place as honorable and a station as dignified as the members of any profession in the land; and as a body they are indispensable in providing for our wants and necessities, and a very great portion of the comforts of the whole community.

In fact, our national greatness has been in a great measure achieved through the industry, enterprise, skill and *intelligence* of our mechanics. Thousands of individual instances may be adduced to sustain the position we have assumed, and hundreds more of the same class have, by their influence, example and talents, verified the truth of our assertion. Franklin, the printer, who worked many years at this honorable avocation, and, perhaps, contributed more than any other individual, to advance science and the arts in his early life, rose high in the scale of usefulness and honor—became one of the most distinguished statesmen and philosophers of his age and died lamented by the people of "two hemispheres." Roger Sherman, one of the signers of the Declaration of Independence, and who long afterwards was distinguished for his talents, it is well known, was a shoemaker. The late Hon. Andrew Kennedy, of Ohio, at the age of nineteen years, was a laboring blacksmith, unable to read or write. He dropped the sledge hammer and took to books, read law, and soon became a popular advocate. He removed to Indiana, was soon sent to the Legislature, and from the assembly was transferred to Congress, where he served three full terms. He was a member of the Indiana Legislature when he was cut down by death comparatively at the early age of 37 years. The late Judge Martin, while a lad, left his paternal roof at Marseilles and arrived in North Carolina friendless and nearly penniless, and to avoid starvation, became apprentice to a printer. At the expiration of his apprenticeship he worked as a journeyman three years—bought out his employer—afterwards removed to Louisiana—became a judge of the Supreme Court—and, during the thirty-seven years which he was retained in office, in all his important decisions, in which immense interests were involved, he ever maintained a character above the least suspicion of reproach—was remarkable as a man of the sternest integrity, and died honored by all, with a fortune of $400,000. Governor Briggs, of Massachusetts, it is well known, was the son of a blacksmith, and apprentice to a hatter, but manifesting a strong inclination for learning, subsequently studied law, and is now the chief executive of the commonwealth.

We will refer simply to one more of the numerous instances which might be mentioned of the distinguished mechanics of our country, viz., that of Elihu Burritt, of Worcester, who, without wealth or any peculiar facilities for study—while working at the anvil—acquired a knowledge of nearly *fifty* different languages; and posterity will long honor, as a Christian philanthropist of distinguished usefulness, "the learned blacksmith" of Massachusetts.

These examples are sufficient to prove the assertion of John Randolph, the eccentric orator of Roanoke, that "labor is necessary to excellence. This is an eternal truth, although vanity cannot be brought to believe, or indolence to heed it."

This truth is strikingly verified in a host of instances, and should impress upon every mind the deeply responsible relation which our mechanics hold in reference to the advancement of the arts, the promotion of science, and the true greatness of our country.

We have been induced to make the above brief remarks, from having recently had the facilities and advantages offered by the Mechanics Institute of this city, to inventors, artisans and others, presented before us; and as introductory to some plan of operation for the mutual benefit of mechanics throughout the country, which we will present at some future opportunity.—*Farmer and Mechanic.*

NEW FUR FABRIC.

The New York *Mirror* says, we have examined, at the store of Messrs. Seaman and Muir, some specimens of a new fabric for winter garments, which appears to us likely to supercede every material now in use for keeping the body warm, and protecting it from the piercing cold winds and chilling damps of our variable climate. The fabric is composed of the fur of animals, and is lighter, softer, firmer and warmer than any other material ever worn as a covering to the human body. It is the perfected ideal of cloth; in beauty and comfort it is far superior to the finest fabrics of camel's hair. For the use of invalids, or for all whose occupations lead to exposure to the rigors of wintry weather, it must prove of the highest benefit. The softest satin is harsh to the touch, and the finest lamb s

wool coarse, compared with this beautiful fabric. It is made into cloth composed wholly of fur, and of part silk and part fur. As this elegant material is the product of an invention which has just been patented in England by unusual process of an act of parliament, and the manufacture of it is still in its incipient stages, the price, although not by any means extravagant, must necessarily be higher than it will be by and by.

It is made into gloves and stockings, and may be made up for the most delicate garments used for ladies and children. The under-shirts made of this new material are appropriately called "Astoria Jackets."

IMPROVED GRATES.

Mr. A D. Spoor, N. Y., has invented and taken measures to secure a patent for an improvement in grates, which is applicable to stationary and locomotive engines, also stoves and furnaces. It consists in having a stationary or fixed grate cast in one or more pieces, with bars placed a little further apart in common grates, and combined with this there are a number of moveable grate bars united together by joints to axes underneath, which allow, by a lever, the said bars to lie on a line with the fixed bars, to move vertically between the above the fixed bars or fire box bottom, and to be elevated and depressed angularly at both ends. This improvement in grates allows the burning of very fine coal, answers the purpose of a poker or clearer to remove all scales and caking of the coals, and by having square shoulders on the moveable bars, they can be projected upwards to make the shoulders set snug to the bottom of the fixed bars, thus answering the damper also.—*Rural New Yorker.*

Ladies' Department.

YEAST.

The article in which yeast is kept must, when new yeast is made, or fresh yeast bought, be scalded and emptied, and then have a salt spoon full of saleratus put in, and be rinsed out again with warm water. If it is glass, rinsing twice with warm water will answer. Junk bottles are best for holding yeast, because they can be corked tight, and easily cleansed.

Potato Yeast.—By those who use potato yeast, it is regarded as much the best, as it raises bread quicker than common home-brewed yeast, and, best of all, never imparts the sharp, disagreeable yeast taste to bread or cake, often given by hop yeast. Mash half a dozen peeled boiled potatoes, and mix in a handful of wheat flour, and two teaspoons full of salt, and after putting it through a colander, add hot water till it is batter. When blood warm, put in a half tea cup of distillery yeast, or twice as much potato or other home-brewed. When raised, keep it corked tight, and make it new very often in hot weather. It can be easily made when potatoes are boiled for dinner.

Home-made Yeast, which will keep good a month.—Four quarts of water, two hands full of hops, eight peeled potatoes, sliced, all boiled soft, mixed and strained through a sieve. To this, add a batter, made one-third of Indian and two-thirds of rye in a pint of cold water, and then boil the whole ten minutes. When cool as new milk, add a tea cup of molasses, a table spoon full of ginger, and a tea cup of distillery yeast, or twice as much home-brewed.

Home-brewed Yeast more easily made.—Boil a hand full of hops half an hour in three pints of water. Pour half of it, boiling hot, through a sieve, on to nine spoons full of flour, mix, and then add the rest of the hop water. Add a spoon full of salt, half a cup of molasses, and when blood warm, a cup of yeast.

WHAT A PRUDENT WIFE DID.

A fact which I came in possession of years ago may illustrate the character of the New Englanders, and reveal the origin of some branches of their profitable business. S. W—— was the son of our country clergyman, and was accustomed to laboring on a farm in summer and keeping school in winter. He was moral, industrious and frugal, and took a wife possessing the same qualities, together with a shrewd propensity to calculate the cost of all articles of living. One day her husband brought home the cloth and trimmings for a coat. The wife inquired the price of the buttons, which she noticed were made of cloth "lasting," or, more fully, "everlasting," covered on wooden button moulds. She thought she could afford a good button, made by hand, for less money. The next day, like the true daughter of a Yankee, she tried the thing out. She bought the cloth by the yard, and the moulds by the dozen, and in a week she had better buttons, at a less price, in the market. The operation, it became evident, would pay. So the husband quit farming and school-teaching; bought the cloth, which the wife cut into button covers; he then purchased a lot of button-moulds, hired the women and girls of the neighborhood to make them at great profit. Soon another entered into partnership with him, and invented machinery to do the work. Then the plain "lasting" was changed to figured velvet, and satin, and twist. Improvement on improvement in machinery was made, till they equalled the best English, French, or German buttons. S—— W—— now owns one of the sweetest villages in the Connecticut valley, and almost supplies the United States with buttons for coats and overcoats. He has endowed an academy munificently; has contrib uted like a prince to the funds of a highly distinguished and useful female seminary, and has rescued a noble college from embarrasment. So much for the carefulness of a prudent wife, and so much for a disposition to earn an honest living in some way, rather than thriving in idleness on the hard and too often unrequited toil of others.—*National Era.*

To Whiten Linen.—Stains occasioned by fruit, iron rust, and other similar causes, may be removed by applying to the parts injured a weak solution of the chloride of lime—the cloths having been previously well washed, or of soda, oxalic acid or salts of lemon, in warm water; the parts subjected to this operation should be subsequently well rinsed in soft, clear water, without soap, and then immediately dried in the sun.

To take Stains out of Mahogany.—Mix six ounces of the spirits of salt, and half an ounce of rock salt of lemons (pulverized) together. Place a few drops on the spot, and rub it briskly until it is removed. Then wash off with cold water.

PRESERVING LARD.

Take lard in the leaf, excluding all bloody or lean pieces, then salt it down as you would pork; using about as much salt as for pork. When wanted for use, try out enough lard to last a few weeks. This mode is communicated by a gentleman who has had much experience in this business, and he prefers this mode as the lard keeps perfectly sweet through the year.

TEMPER.

No trait of character is more valuab'e in a female than the possession of a sweet temper. Home can never be made happy without it. It is like the flowers that spring up in our pathway, reviving and cheering us. Let a man go home at night, wearied and worn by the toils of the day, and how soothing is a word dictated by a good disposition. It is sunshine falling upon his heart. He is happy and the cares of life are forgotten. A sweet temper has a soothing influence over the minds of the whole family. Where it is found in the wife and mother, you observe kindness and love predominating over the bad feelings of the natural heart. Smiles, kind words and looks, characterize the children, and peace and love have their dwelling there. Study then to acquire and retain a sweet temper. It is more valuable than gold; it captivates more than beauty, and to the close of life retains all its freshness and power.

Barley Water for the Sick and Convalescent.—Take two table-spoonfulls of pearl barley, wash it very clean, and add to it a pint of boiling water; let it boil for five minutes, pour off this water, and add two quarts more boiling water, reduce it to two pints and a half, and strain. This is simple barely water; it may be made very pleasant by adding the following: one ounce of figs, two ounces of raisins, stoned, a quarter of an ounce of liquorice; boil it till reduced to a quart, and strain.

ACKNOWLEDGMENTS.

With the following communication, we have received the fruit therein named. The apples which we received of Gen. Newhall, strongly resemble the Oakes apple from Mr. Black, and they may be identical. It is difficult to decide with only a few specimens. They look and taste nearly the same. The Oakes apple is a very fair, handsome fruit, excellent for cooking, and it is a good dessert apple, but not of a high quality.

Hunt's Russett looks like the American golden Russett, and the quality is about the same. The Russet, to which Mr. Black refers is not the American Golden Russatt, but probably the English Russett. The true American Golden Russett, called by Coxe, Sheepnose, and Bullock's Pippin, is a very late keeper, and is frequently in fine condition in April and May. It is one of the very best of apples, but owing to its small size, it may not be so profitable for the market as some other varieties. Some persons who have cultivated Hunt's Russett extensively, on being shown the American Golden Russett in this market, pronounced them to be identical, yet we should be pleased to have the subject investigated more thoroughly.

Mr. Cole:—I have forwarded to you a few specimens of my favorite Oakes apple, and also of Hunt's Russett, cultivated in this vicinity; if these specimens of the Oakes apple resemble those received from Gen. Newhall, it will support you in your judgment of the non-identity of this apple with the Fall Harvey. I am confident that, (although in some important particulars they resemble each other) the apple which I cultivate for the Oakes apple is in every respect superior, is not so likely to rot on the tree or fall prematurely, and is not in eating order until the Harvey is gone some weeks, and keeping well until January, while it is one of the very best flavored, that I am acquainted with, and in my judgment worthy of extensive cultivation.

Hunt's Russett, I think you erroneously judged a few years since to be the American Golden Russett. We have in this vicinity both apples, and consider the Hunt's superior in many respects, and mostly for its long keeping. It is a longer shaped apple, a very tender skin, grows fair, uniform bearer, pulp white, crispy and very spicy; and is a very great favorite.

I can furnish scions in the spring of the above apples if wanted.

Respectfully yours, James D. Black.

Danvers New Mills, Dec. 10th, 1850.

NOTICES OF PUBLICATIONS.

Boston Almanac for 1851, by Damrell & Moore and George Coolidge; published by B. B. Mussey & Co., 29 Cornhill, and Thomas Groom, 82 State Street. This little annual is well prepared, and it is executed in very neat style. It contains in a small space a large amount of excellent matter. Besides the city record, which as a directory is valuable to all, in town and country, it contains a State, New England, national, and universal record. This work is beautifully embellished. It is sold at the very low price of 25 cents.

Circular of the American Live Stock Insurance Company.—This company was established at Vincennes, Ia., in January, 1850, with a capital of $100,000. This company insures all kinds of stock against loss by disease, fire, accidents, &c. Marshall P. Wilder, Jr. 5 Scollay's Building, Tremont Row, general agent for Massachusetts and Vermont.

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